SDS ID: Hyd2112

REX AW Hydraulic Oils ISO 10, 22, 32, 46, 68 Safety Data Sheet

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

REX AW Hydraulic Oils, ISO 22, 32, 46, 68, 100, 150, 220

Product Code

Prefix 31

Synonyms

Petroleum oil, Petroleum hydrocarbon, lube oil, lubricant.

Product Use

Hydraulic oil. If this product is used in combination with other products, refer to the Safety Data Sheet for those products.

Restrictions on Use

DISTRIBUTOR
Midwest International
825 N Cass Ave, Suite 309
Westmont, IL 60559

www.midwestintl.com
Phone: 630-819-7201
Emergency Phone #:
630-819-7201

Issue Date

December 2, 2019

Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with Schedule 1 of Canada's Hazardous Products Regulations (HPR) (SOR/2015-17) and paragraph (d) of 29 CFR 1910.1200 in the United States

None needed according to classification criteria.

GHS Label Elements

Symbol(s)

None needed according to classification criteria.

Signal Word

None needed according to classification criteria.

Hazard Statement(s)

None needed according to classification criteria.

Precautionary Statement(s)

Prevention

None needed according to classification criteria.

Response

None needed according to classification criteria.

Storage

None needed according to classification criteria.

Disposal

Dispose of in accordance with all applicable federal, state and local regulations.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
64742-58-1	Lubricating oils, petroleum, hydrotreated spent	9-99
64742-62-7	Residual oils (petroleum), solvent dewaxed	0-71
68649-42-3	Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	0.2-0.55
128-39-2	2,6-Di-tert-butylphenol	0.085-0.17
72623-85-9	Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based, high-viscosity	0.085-0.17
Concentration ranges are used to express batch-to-batch variability in the production of the mixture.		

Section 4 - FIRST AID MEASURES

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical attention if needed.

Skin

IF ON SKIN: Wash with plenty of soap and water. Get medical attention if needed.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get medical attention if needed.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

Most Important Symptoms/Effects

Acute

No information on significant adverse effects.

Delayed

Repeated exposure may cause skin dryness or cracking.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, dry chemical, regular foam, water spray, water fog. Water or foam may cause frothing.

Unsuitable Extinguishing Media

Do not use high pressure water streams.

Special Hazards Arising from the Chemical

Negligible fire hazard.

Hazardous Combustion Products

Decomposition and combustion materials may be toxic. Burning may produce aldehydes, hydrogen sulfide, alkyl mercaptans, sulfides, nitrogen oxides, phosphorus oxide, sulfur oxides, carbon monoxide, unidentified organic compounds.

Fire Fighting Measures

Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. Keep unnecessary people away, isolate hazard area and deny entry.

Special Protective Equipment and Precautions for Firefighters

A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8.

Methods and Materials for Containment and Cleaning Up

Remove all ignition sources. Do not touch or walk through spilled products. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or absorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal. Additionally, for large spills: Dike far ahead of liquid spill for collection and later disposal.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Keep away from sparks or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean tools and explosion-proof equipment. When transferring large volumes of product, metal containers, including trucks and tank cars, should be grounded and bonded. These products have a low vapor pressure and are not expected to present an inhalation hazard under normal temperatures and pressures. However, when aerosolizing, misting, or heating these products, do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, shoes.

Conditions for Safe Storage, Including any Incompatibilities

None needed according to classification criteria.

Keep container tightly closed when not in use and during transport. Store containers in a cool, dry place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous.

Incompatible Materials

Acids, oxidizing agents, reducing agents.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Canada, ACGIH, OSHA, and NIOSH have not developed exposure limits for any of this product's components.

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

There are no biological limit values for any of this product's components.

Engineering Controls

Provide general ventilation. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls.

Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection

Wear safety glasses. Additional protection like goggles, face shields, or respirators may be needed dependent upon anticipated use and concentrations of mists or vapors. Eye wash fountain and emergency showers are recommended. Contact lens use is not recommended.

Respiratory Protection

A respiratory protection program which meets USA's OSHA General Industry Standard 29 CFR 1910.134 or Canada's CSA Standard Z94.4-M1982 requirements must be followed whenever workplace conditions warrant a respirator's use. Consult a qualified Industrial Hygienist or Safety Professional for respirator selection guidance.

Glove Recommendations

Where skin contact is likely, wear neoprene, nitrile, or equivalent protective gloves; use of natural rubber or equivalent gloves is not recommended. To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, coveralls, long sleeve shirts, or other protective clothing. When product is heated and skin contact is likely, wear heat-resistant gloves, boots, and other protective clothing.

Protective Materials

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: Safety glasses, Gloves, and Lab coat or apron.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Amber, red, blue to green liquid.	**Physical State**	Liquid
Odor	petroleum	**Color**	Amber, red, blue to green
Odor Threshold	Not available	**pH**	Not available
Melting Point	Not available	**Boiling Point**	246 °C (475 °F Minimum)
Boiling Point Range	Not available	**Freezing point**	Not available
Evaporation Rate	Not available	**Flammability (solid, gas)**	Not available
Autoignition Temperature	Not available	**Flash Point**	165 °C (329 °F Minimum)
Lower Explosive Limit	Not available	**Decomposition temperature**	Not available

Upper Explosive Limit	Not available	**Vapor Pressure**	**HydAW2112** <0.1 mmHg @ 68 °
Vapor Density (air=1)	Not available	**Specific Gravity (water=1)**	F (20º C) 0.88 (Approximate
Water Solubility	(Insoluble)	**Partition coefficient: n-octanol/water**	Water = 1)
Viscosity	>20.5 mm2/s 40 ºC (104 °F)	**Kinematic viscosity**	Not available
Solubility (Other)	Not available	**Density**	Not available
Pour Point	-6 °C (21 °F Maximum)	**Volatile Organic Compounds (As Regulated)**	7.3 lb/gal (US Approximate)
Molecular Weight	Not available		Negligible, as per 40 CFR 51.100(s)

Section 10 - STABILITY AND REACTIVITY

Chemical Stability
Stable under normal temperatures and pressures.
Possibility of Hazardous Reactions
Polymerization is not known to occur under normal temperature and pressures. Not reactive with water.
Conditions to Avoid
Avoid sparks or flame.
Incompatible Materials
Acids, oxidizing agents, reducing agents.
Hazardous decomposition products
None under normal temperatures and pressures. See also SECTION 5: HAZARDOUS COMBUSTION PRODUCTS.

Section 11 - TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure
Inhalation
No information on significant adverse effects.
Skin Contact
Prolonged or repeated skin contact may cause skin dryness or cracking.
Eye Contact
No information on significant adverse effects.
Ingestion
May be harmful if swallowed.
Acute and Chronic Toxicity
Component Analysis - LD50/LC50
The components of this material have been reviewed in various sources and the following selected endpoints are published:
Lubricating oils, petroleum, hydrotreated spent (64742-58-1)
Oral LD50 Rat >2000 mg/kg; Dermal LD50 Rabbit >4480 mg/kg
Residual oils (petroleum), solvent dewaxed (64742-62-7)
Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg; Inhalation LC50 Rat 2.18 mg/L 4 h

2,6-Di-tert-butylphenol (128-39-2)
Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >10 g/kg
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based, high-viscosity (72623-85-9)
Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg; Inhalation LC50 Rat 2.18 mg/L 4 h

Product Toxicity Data
Acute Toxicity Estimate

Oral	> 2000 mg/kg

Immediate Effects
No information on significant adverse effects.
Delayed Effects
No information on significant adverse effects.
Irritation/Corrosivity Data
May cause slight skin or respiratory irritation.
Respiratory Sensitization
Based on best current information, there is no known human sensitization associated with these products.
Dermal Sensitization
Based on best current information, there is no known human sensitization associated with this product.
Component Carcinogenicity
None of this product's components are listed by ACGIH, IARC, NTP, DFG or OSHA.
Germ Cell Mutagenicity
Based on best current information, there is no known mutagenicity associated with this product.
Tumorigenic Data
No information is available for the product.
Reproductive Toxicity
Based on best current information, there is no known reproductive toxicity associated with this product.
Specific Target Organ Toxicity - Single Exposure
No target organs identified.
Specific Target Organ Toxicity - Repeated Exposure
No target organs identified.
Aspiration hazard
No information available for the product.
Medical Conditions Aggravated by Exposure
Individuals with pre-existing respiratory tract (nose, throat, and lungs), eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity
Harmful to aquatic life with long lasting effects.
Component Analysis - Aquatic Toxicity

Residual oils (petroleum), solvent dewaxed	**64742-62-7**
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	**68649-42-3**

Fish:	LC50 96 h Pimephales promelas 1 - 5 mg/L [static]; LC50 96 h Pimephales promelas 10 - 35 mg/L [semi-static]
Invertebrate:	EC50 48 h Daphnia magna 1 - 1.5 mg/L IUCLID
2,6-Di-tert-butylphenol	**128-39-2**
Invertebrate:	EC50 48 h Daphnia magna 0.45 mg/L IUCLID
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based, high-viscosity	**72623-85-9**
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID

Persistence and Degradability

No information available for the product.

Bioaccumulative Potential

No information available for the product.

Mobility

No information available for the product.

Other Toxicity

No additional information is available.

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose in accordance with federal, state, provincial, and local regulations. The responsibility for proper waste disposal lies with the owner of the waste. Processing, use, or contamination by the user may change the waste code applicable to the disposal of this product. Regulations may also apply to empty containers. Contact Midwest International regarding proper recycling or disposal.

Component Waste Numbers

The U.S. EPA has not published waste numbers for this product's components.

Section 14 - TRANSPORT INFORMATION

US DOT Information: Not regulated for transport.
IATA Information: Not regulated for transport.
IMDG Information: Not regulated for transport.
TDG Information: Not regulated for transport.

International Bulk Chemical Code

This material does not contain any chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

Section 15 - REGULATORY INFORMATION

Canada Regulations

CEPA - Priority Substances List

None of this product's components are on the list.

Ozone Depleting Substances

None of this product's components are on the list.

Council of Ministers of the Environment - Soil Quality Guidelines

None of this product's components are on the list.

Council of Ministers of the Environment - Water Quality Guidelines

None of this product's components are on the list.

U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	**68649-42-3**
SARA 313:	1 % de minimis concentration (related to Zinc compounds)

SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories

No hazard categories applicable.

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	**68649-42-3**	Yes	No	No	Yes	Yes

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

Not listed under California Proposition 65.

Component Analysis - Inventory

Lubricating oils, petroleum, hydrotreated spent (64742-58-1)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	No	No	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	No	Yes	Yes

Residual oils (petroleum), solvent dewaxed (64742-62-7)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	No	No	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	No	No	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	No	Yes	Yes

2,6-Di-tert-butylphenol (128-39-2)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based, high-viscosity (72623-85-9)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	No	No	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	No	Yes	Yes	No	Yes	Yes

Section 16 - OTHER INFORMATION

NFPA Ratings

Health: 1 Fire: 1 Instability: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Summary of Changes

Update to composition and resultant changes.

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania*; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CFR - Code of Federal Regulations (US); CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC – European Commission; EEC - European Economic Community; EIN - European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; F - Background (for Venezuela Biological Exposure Indices); IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition

coefficient; KR KECI Annex 1 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL); KR KECI Annex 2 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL) , KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX – Mexico; Ne- Non-specific; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; Nq - Non-quantitative; NSL – Non-Domestic Substance List (Canada); NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL- Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; Sc - Semi-quantitative; STEL - Short-term Exposure Limit; TCCA – Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW – Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); VN (Draft) - Vietnam (Draft); WHMIS - Workplace Hazardous Materials Information System (Canada).

Other Information

Disclaimer:

User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, Midwest International assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to the information or the product to which the information refers. The data contained on this sheet apply to the product as supplied to the user.